

Claims:

- 1 1. A heat sink assembly comprising:
- 2 a frame;
- 3 a plurality of fins spacedly received in the frame, each fin defining at least
- 4 one through hole and forming a plurality of tabs extending around a
- 5 periphery of each through hole; and
- 6 at least one duct inserted through the through holes of the fins and in
- 7 thermal contact with the plurality of tabs.
- 1 2. The heat sink assembly as recited in claim 1, wherein the plurality of tabs
- 2 of each fin comprise a tapered tab and a plurality of locating tabs.
- 1 3. The heat sink assembly as recited in claim 1, wherein a slot is defined in
- 2 each tapered tab of each fin, for receiving an end of a tapered tab of an
- 3 adjacent fin.
- 1 4. The heat sink assembly as recited in claim 1, wherein a pair of locating
- 2 portions extends from each fin for forming intervals between the fins.
- 1 5. The heat sink assembly as recited in claim 4, wherein a pair of abutting
- 2 flanges respectively extends vertically toward each other from free ends of
- 3 the locating portions of each fin, for abutting an adjacent fin.
- 1 6. The heat sink assembly as recited in claim 1, wherein each duct is made of
- 2 highly heat-conductive metal.
- 1 7. The heat sink assembly as recited in claim 1, wherein the frame comprises
- 2 a pair of generally L-shaped casings connected together.
- 1 8. The heat sink assembly as recited in claim 7, wherein at least one casing
- 2 defines a pair of end tabs for abutting outmost fins.
- 1 9. The heat sink assembly as recited in claim 7, wherein at least one latching

2 hole is defined in each casing for interferentially engaging with an end of  
3 the corresponding duct.

1 10. The heat sink assembly as recited in claim 7, wherein at least one  
2 reinforcing flange extends inwardly from opposite lateral edges of a  
3 horizontal wall of at least one casing, and at least one screw hole is defined  
4 in each reinforcing flange for securing the heat sink assembly to a fan.

1 11. A heat sink system comprising:

2 a fan;

3 a heat pipe adapted to be attached to a heat-generating electronic device,  
4 the heat pipe comprising at least one free end; and

5 a heat sink secured to the fan, the heat sink comprising a frame, a plurality  
6 of fins and at least one duct, the fins and the duct being accommodated in  
7 the frame, each fin defining at least one through hole for insertion of the  
8 corresponding duct therein, the frame defining at least one latching hole  
9 for interferentially engaging with an end of the corresponding duct, each  
10 duct interferentially receiving the corresponding free end of the heat pipe  
11 therein;

1 12. The heat sink system as recited in claim 11, wherein a tapered tab and at  
2 least one locating tab extend from each fin around a periphery of each  
3 through hole, for abutting the corresponding duct.

1 13. The heat sink system as recited in claim 11, wherein a pair of locating  
2 portions extends from each fin, for forming intervals between the fins.

1 14. The heat sink assembly as recited in claim 13, wherein a pair of abutting  
2 flanges respectively extends vertically toward each other from free ends of  
3 the locating portions of each fin, for abutting an adjacent fin.

1 15. The heat sink assembly as recited in claim 11, wherein each duct is made

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of highly heat-conductive metal.

1 16. The heat sink assembly as recited in claim 11, wherein the frame  
2 comprises a pair of generally L-shaped casings connected together.

1 17. The heat sink assembly as recited in claim 16, wherein at least one casing  
2 defines a pair of end tabs for abutting outmost fins.

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18. The heat sink assembly as recited in claim 16, wherein at least one  
latching hole is defined in each casing for interferentially engaging with an  
end of the corresponding duct.

1 19. The heat sink assembly as recited in claim 16, wherein at least one  
2 reinforcing flange extends inwardly from opposite lateral edges of a  
3 horizontal wall of at least one casing, and at least one screw hole is defined  
4 in each reinforcing flange for securing the heat sink assembly to a fan.

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